Maryland Historical Trust

Maryland Inventory of Histo	ric Properties number: 15/	1-466C	·
Name: B-0454		down Black Ra	MReen
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The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

	MARYLAND HISTO	RICAI	TRU	ST					
Eligibility RecommendedX_			Eligibi	lity N	ot Re	comm	ended		
Criteria:ABC _	D Considerations: _	A _	B	_c _	_D_	E _	F _	G_	_None
Comments:		·	: 				······		
Reviewer, OPS:_Anne E. Bruder Date:3 April 2001_									
Reviewer, NR Program:Peter E. Kurtze			Date:3 April 2001						

MARYLAND INVENTORY OF HISTORIC PROPERTIES HISTORIC BRIDGE INVENTORY MARYLAND STATE HIGHWAY ADMINISTRATION MARYLAND HISTORICAL TRUST

NAME AND SHA NO.: B-0454

County: Stringtown String
Ownership: _ State X County _ Municipal _ Other
Bridge projects over: _ Road _ Railway X Water _ Land
Is bridge located within designated district?: X yes _ no X NR listed district _ NR determined eligible district locally designated _ other Name of District Western Run-Belfast Road Historic District
BRIDGE TYPE
Timber Bridge Beam Bridge Truss-Covered Trestle Timber-and-Concrete
Stone Arch Bridge
Metal Truss Bridge
Moveable Bridge Swing Bascule Single Leaf Bascule Multiple Leaf Vertical Lift Retractile Pontoon
Metal Girder Rolled Girder Rolled Girder Concrete Encased Plate Girder Plate Girder Concrete Encased
Metal Suspension
Metal Arch
Metal Cantilever
X Concrete _ Concrete Arch _ Concrete Slab X Concrete Beam _ Rigid Frame _ Other Type Name 204

MARYLAND INVENTORY OF HISTORIC PROPERTIES HISTORIC BRIDGE INVENTORY MARYLAND STATE HIGHWAY ADMINISTRATION MARYLAND HISTORICAL TRUST

DESCRIPTION

Describe the Setting:

Bridge B-0454 carries Stringtown Road over Black Rock Run in central Baltimore County. Stringtown Road runs east and west, while Black Rock Run flows north-south. Located in the Piedmont physiographic province, a region characterized by variegated topography created by rivers and streams cutting through the valley, the bridge is surrounded by wooded land, open fields and several houses within one-quarter mile.

Describe the Superstructure and Substructure: (Discuss points identified in Context Addendum, Section C)

Bridge B-0454, a single-span concrete tee-beam structure with a 30 degree skew, has a clear span length of 29' and a total bridge length of 38'. The 27'-4" wide roadway carries two lanes of traffic. The open balustrade concrete parapets and the concrete slab are integrated with the five concrete girders. The substructure consists of concrete abutments and concrete wing walls.

A 1993 inspection report gave this bridge an overall rating of satisfactory. Details of the structure's defects included weathering, spalling, and scaling of the concrete balustrades, hairline map craps and moderate honeycombing on the underside of the deck, efflorescence on the exterior bays, vertical cracking in the west abutment, and severe scouring at the northeast wing wall.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Slightly more than two-thirds (76) of that total were single-span bridges.

Discuss major alterations:

According to available documentary evidence, this bridge has not undergone any major alterations.

HISTORY

When Built: 1931

Why Built: Statewide road improvement programs and local transportation needs.

Who Built: Unknown Who Designed: Unknown

Why Altered: N/A

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Was this bridge built as part of an organized bridge building campaign?: No

This bridge was built during the Good Roads Movement era but was not one of the primary corridors slated for improvement.

SURVEYOR ANALYSIS

This bridge may have NR significance for association with:

_ A (Events) _ B (Person) _ C (Engineering/Architectural Character)

Was this bridge constructed in response to significant events in Maryland or local history?

In many ways, Baltimore County was a leader in modern bridge construction, affecting the materials and design of concrete structures throughout the state. Baltimore was the first of the state's counties to hire a professional engineer to oversee construction and maintenance of its roads. Early Maryland Geological Survey and State Road Commission Reports relate that the county began to build concrete bridges and culverts in 1901, and that by 1903 had constructed many good roads and replaced old wooden bridges with permanent structures. The "progressive work" by the Baltimore county engineer in 1903 was evidenced by the first reinforced concrete highway bridge built in the state. The method of reinforcing concrete using steel rods embedded in concrete beams allowed the girders to withstand heavy loads with no steel surface exposed to air, thereby significantly reducing maintenance costs.

A 1906 state highway report stated that improvement projects begun in 14 counties included the widening, straightening, and/or grading of many existing roads, as well as the construction of many new bridges to carry these rebuilt roads. The rapid increase of automobile, truck, and bus traffic during the early decades of the twentieth century prompted the replacement of old bridges with new, modern concrete structures. During the 1920s, the State Road Commission embarked upon a plan to both improve the safety and comfort of the primary roads while also building up the secondary and farm-to-market road system. The establishment of district engineering offices during the 1910s, the creation of a separate bridge department within the State Road Commission in 1920, and the development of standard statewide specifications for bridges undoubtedly aided the construction of nearly 750 concrete bridges and culverts between 1902 and 1929 in Baltimore County. Finally, the elimination of toll roads, many of which ran through the county and terminated in Baltimore city, may have induced the improvement of additional county roads in an effort to provide unlimited access through the county.

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When the bridge was built, and/or given a major alteration, did it have a significant impact on the growth and development of the area?

No, the construction of this bridge did not play an active role in the growth or development of this portion of Baltimore County.

Is the bridge located in an area which may be eligible for historic designation, and would the bridge add or detract from the historic and visual character of the possible district?

Yes, this bridge is located in the National Register-listed Western Run-Belfast Road Historic District.

Is the bridge a significant example of its type?

Yes, due to its apparent lack of major alterations and satisfactory condition, this bridge stands as a significant example of its type.

Does the bridge retain integrity of the important elements described in the Context Addendum?

Yes, this bridge retains integrity of its character defining elements. Although recent reports indicate that the structure exhibits signs of age and wear, including cracking and spalling of the parapets, abutments, and wing walls, none of these character defining elements has been replaced or removed.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer, and why?

No, this bridge is not a significant example of the work of the manufacturer, designer, and/or engineer. This bridge was most likely built to standard state specifications, which corresponded to the structure's span length and year.

Should this bridge be given further study before significance analysis is made, and why?

Yes, Further study should focus on how this bridge may fit into the Western Run-Belfast Road Historic District.

Date: 13 May 1996

Telephone: (717) 691-1340

MARYLAND INVENTORY OF HISTORIC PROPERTIES HISTORIC BRIDGE INVENTORY MARYLAND STATE HIGHWAY ADMINISTRATION MARYLAND HISTORICAL TRUST

BIBLIOGRAPHY

Baltimore County Department of Public Works

Bridge inspection reports. Located in the files of the Engineering Bureau, Baltimore

County Department of Public Works, Towson, Maryland.

Crosby, Walter Wilson

1906 First Report on State Highway Construction (May 1905-January 1906). The Johns

Hopkins Press, Baltimore.

1908 Second Report on State Highway Construction (January 1906-January 1908). The Johns

Hopkins Press, Baltimore.

Johnson, A.N.

1903 Third Report on the Highways of Maryland (1902-1903). The Johns Hopkins Press,

Baltimore.

LeViness, Charles T.

1958 A History of Road Building in Maryland. State Roads Commission of Maryland,

Baltimore.

P.A.C. Spero and Company and Louis Berger and Associates, Inc.

1994 Historic Bridges in Maryland: Historic Context Report. Prepared for Maryland State

Highway Administration, Maryland State Department of Transportation, Baltimore.

State Roads Commission of Maryland

1930 Reports of the State Roads Commission of Maryland for the Years 1927, 1928, 1929,

and 1930. State of Maryland, State Roads Commission, Baltimore.

SURVEYOR INFORMATION

Name:

Margaret A. Bishop

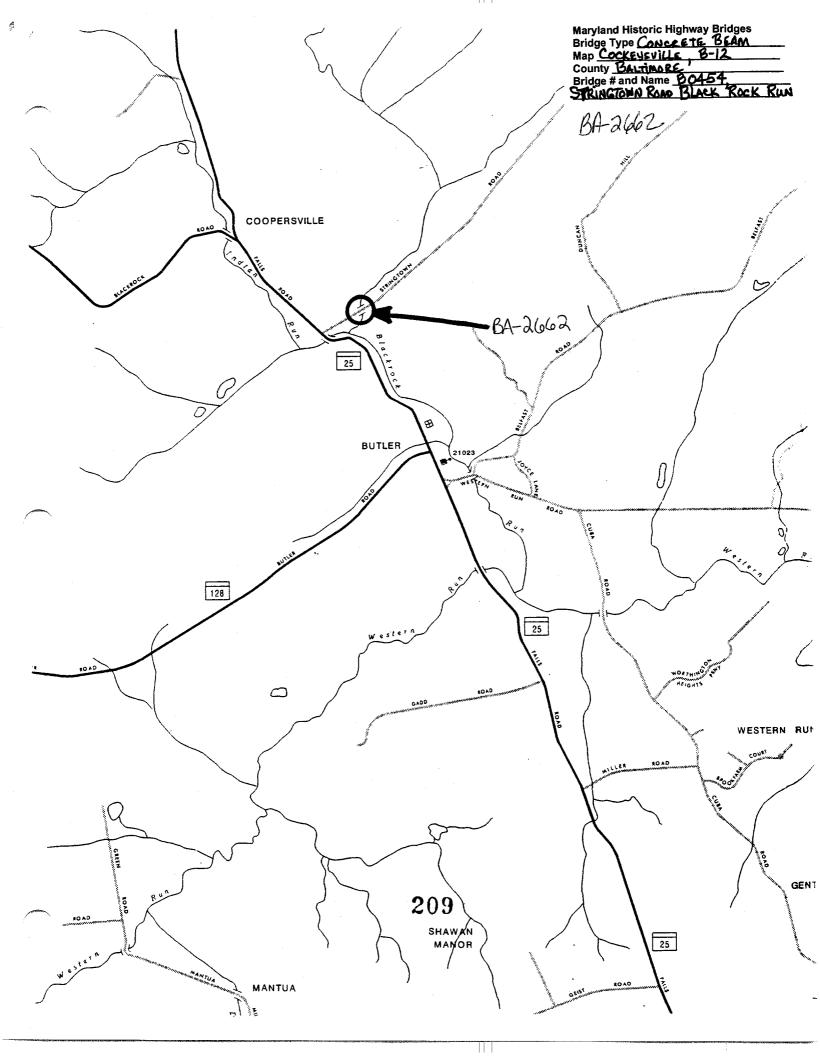
Organization:

KCI Technologies, Inc.

Address:

5001 Louise Dr., Suite 201

Mechanicsburg, PA 17055





Inventory # <u>BA-2662</u>

Name 80454 - STRINGTOWN RD OVER BLACKROCK RU	IN
County/State BALTIMORE COUNTY/NO	
Name of Photographer OAVE DIENL Date 1/95	
Location of Negative SHA	_
Description EAST APPRUACH LOOKING WEST	-
Number 4 of 31 4	



Inventory #<u>BN-2462</u>

		OWN RO OVER BLA	
County/State	BAL-	TIMORE COUNT	IMO
Name of Pho	otographer	loane die	CHL
Date			
Location of 1	Negative	SHA	
	111		
Description	SULT H	ELEVATION	LODKING
	NORTHV	VEST	
_	A THE	M 1134 SECTOR	
2	/	1	
	27	7	



Inventory #BA-2662

	1-STRINGTOWN RO WER BLACK ROCK RUN
County/State Name of Pho	DOTALL PARE DIEHL
Date 19	5
Location of	Negative SHA
Description	NORTH ELEVATION LOOKING SOUTHEAST
Number 3	of 39 A



Inventory # <u>BA-266</u>2

Name 60454 - STRINGTOWN RO OVER BLACKROCK RUM County/State BALTMORE COUNTY/MD Name of Photographer DAVE DIEHL Date 1 95
Location of Negative SHA
Description WEST APPROACH LOOKING EAST
Number 22 of 39 4